

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re Application of: Mark Dinsmore

Serial No.: 10/790,636 (which is a reissue application of  
6,493,419 issued December 10, 2002)

Filed: March 01, 2004

Title: Optically Driven Therapeutic Radiation Source  
Having Spiral Shaped Thermionic Cathode

Attorney Ref.: 56249-173 (PHLL-157RE)

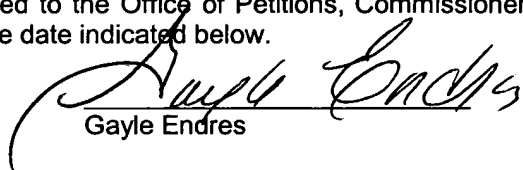
Office of Petitions  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

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**CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail under 37 CFR 1.8(a) in an envelope addressed to the Office of Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Date: 4/4/05

  
Gayle Endres

---

**TRANSMITTAL LETTER**

Dear Sir:

Enclosed herewith for filing in connection with the above-referenced patent application are the following documents:

- 1) Renewed Petition Under 37 CFR § 1.47(b).
- 2) Revised Declaration of Mark G. Lappin Filed in Support of Petition Under 37 CFR § 1.47(b).
- 3) Copy of Decision on Petition mailed February 2, 2005.

4) Copies of Response to Notice to File Missing Parts and related papers previously filed on November 4, 2004, consisting of:

- a) Transmittal Letter;
- b) Response to Notice to File Missing Parts;
- c) Petition Under 37 CFR § 1.47(b);
- d) Declaration of Mark G. Lappin Filed in Support of Petition Under § 1.47(b);
- e) Assent of Assignee to Reissue;
- f) Statement Under 37 CFR § 3.73(b);
- g) Statement Explaining Change in Name of Assignee;
- h) Petition for a Four-Month Extension of Time;
- i) Combined Declaration and Power of Attorney in Reissue Application;
- j) Assignment Documents;
- k) Copy of Notice to File Missing Parts of Reissue Application; and
- l) Acknowledgment Postcard.

5) Copies of Response to Notice of Incomplete Reply (Reissue) and related papers previously filed on December 3, 2004, consisting of:

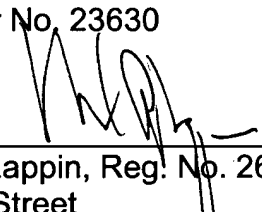
- a) Transmittal Letter;
- b) Response to Notice of Incomplete Reply (Reissue);
- c) Petition for a Four-Month Extension of Time;
- d) Statement Under 37 CFR 3.73(b);

U.S.S.N.: 10/790,636

- e) Copy of Notice of Incomplete Reply (Reissue); and
- f) Acknowledgment Postcard.

Respectfully submitted,  
McDERMOTT, WILL & EMERY  
Customer No. 23630

Date: April 4, 2005



---

Mark G. Lappin, Reg. No. 26,618  
28 State Street  
Boston, MA 02109-1775  
Telephone: (617) 535-4043  
Facsimile: (617) 535-3800



UNITED STATES PATENT AND TRADEMARK OFFICE

COPY

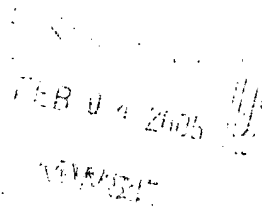
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UNITED STATES PATENT AND TRADEMARK OFFICE  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450  
www.uspto.gov

JGJr: 01-05

Paper No: \_\_



KAO  
4/2/05 Request for Re-  
consideration  
(Final 4/2/05)



4/2/05 Request for  
Reconsideration

MCDERMOTT WILL & EMERY  
ATTN: INTELLECTUAL PROPERTY  
DEPARTMENT  
28 STATE STREET  
BOSTON, MA 02109

COPY MAILED

FEB 02 2005

OFFICE OF PETITIONS

In re Application of  
Dinsmore  
Application No. 10/790,636  
Filed: 1 March, 2004  
Attorney Docket No.: 56249-PHLL-157RE

:  
:  
: DECISION ON PETITION  
:  
:

173

This is a decision on the petition filed on 8 November, 2004 under 37 C.F.R. §1.47(b).

The petition is **DISMISSED**.

NOTES:

- (1) Any request for reconsideration of this decision must be submitted within TWO (2) MONTHS from the mail date of this decision. Extensions of time under 37 C.F.R. §1.136(a) are permitted. The reconsideration request should include a cover letter entitled "Renewed Petition under 37 C.F.R. §1.47(b)."
- (2) There will be no further reconsideration thereafter.

BACKGROUND AND ANALYSIS

The record reflects that:

- the instant application was received and given a filing date of 1 March, 2004, without, *inter alia*, a fully executed oath/declaration;

- the Office mailed a Notice of Missing Parts on 4 May, 2004, and Petitioner replied on 8 November, 2004, however, the Office mailed a Notice of Incomplete Reply on 16 November, 2004;
- Petitioner Mark G. Lappin (reg. No. 26,618) has filed, inter alia, a statement detailing the change in structure of the assignee, assignment documents, and the assent of the assignee to reissue, along with his statement of events to the effect that the non-signing inventor Mark Dinsmore (Mr. Dinsmore) was “offered” the application for review, however, the statement fails to demonstrate that the entire application in fact was transmitted to Mr. Dinsmore as required.

### ANALYSIS

The commentary at MPEP §409.03(d) states:

\* \* \*

Where a refusal of the inventor to sign the application papers is alleged, the circumstances of the presentation of the application papers and of the refusal must be specified in a statement of facts by the person who presented the inventor with the application papers and/or to whom the refusal was made. Statements by a party not present when an oral refusal is made will not be accepted.

Proof that a bona fide attempt was made to present a copy of the application papers (specification, including claims, drawings, and oath or declaration) to the nonsigning inventor for signature, but the inventor refused to accept delivery of the papers or expressly stated that the application papers should not be sent, may be sufficient. When there is an express oral refusal, that fact along with the time and place of the refusal must be stated in the statement of facts. When there is an express written refusal, a copy of the document evidencing that refusal must be made part of the statement of facts. The document may be redacted to remove material not related to the inventor's reasons for refusal. (Emphasis supplied.)

Petitioner has failed to satisfy this burden with, for example, a copy of the transmittal letter forwarding to the non-signing inventor a copy of the entire application (description, claims, abstract, drawings) at the non-signing inventor's last known address—which address must demonstrate he has made a diligent effort to determine as current.

As of this writing, Petitioner has failed to satisfy the showing requirement of the regulation and the petition hereby is dismissed.

The renewed petition, if any, must be accompanied by the corroborating evidence required by 37 C.F.R. §1.47.

Further correspondence with respect to this matter should be addressed as follows:

By mail:       Commissioner for Patents  
                  P.O. Box 1450  
                  Alexandria, VA 22313-1450

By FAX:        IFW Formal Filings  
                  (703) 872-9306  
                  ATTN.: Office of Petitions

By hand:       Mail Stop: Petition  
                  Customer Service Window  
                  Randolph Building  
                  401 Dulany Street  
                  Alexandria, VA 22314

Telephone inquiries concerning this decision may be directed to the undersigned at (703) 305-9199.



John J. Gillon, Jr.  
Senior Attorney  
Office of Petitions

COPY

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Mark Dinsmore

Serial No.: 10/790,636 (which is a reissue application of  
6,493,419, issued December 10, 2002)

Filed: March 1, 2004

Title: Optically Driven Therapeutic Radiation Source Having Spiral Shaped  
Thermionic Cathode

Docket: PHLL-157RE (56249-173)

CERTIFICATE OF MAIL

I certify that this document is being deposited on the date stated below, with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8(a) and is addressed to Mail Stop: Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

11/4/04  
Date

*Elsie M. Saraglow*  
Elsie M. Saraglow

Mail Stop: Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

- 1) Response to Notice to File Missing Parts;
- 2) Petition Under 37 CFR § 1.47(b);
- 3) Declaration of Mark G. Lappin Filed in Support of Petition Under 37 CFR § 1.47(b);
- 4) Assent of Assignee to Reissue;
- 5) Statement Under 37 CFR § 3.73(b);
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- 7) Petition for A Four-Month Extension of Time;
- 8) Combined Declaration and Power of Attorney in Reissue Application;
- 9) Assignment Documents;
- 10) Copy of Notice to File Missing Parts of Reissue Application; and
- 11) Acknowledgment Postcard.

U.S.S.N.: 10/790,636

COPY

The Commissioner is hereby authorized to charge the requisite declaration surcharge of \$130.00 and the Four-month Extension of Time to File fee of \$1,530.00, as well as any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1133.



Date: November 4, 2004

Respectfully submitted,

McDERMOTT, WILL & EMERY

Customer No. 23630

A handwritten signature in black ink, appearing to read "Mark G. Lappin", written over a horizontal line.

Mark G. Lappin, Reg. No. 26,618

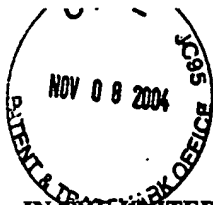
28 State Street

Boston, MA 02109-1775

Telephone: (617) 535-4043

Facsimile: (617) 535-3800

BST99 1432459-1.056249.0173



COF

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Mark Dinsmore  
Serial No.: 10/790,636 (which is a reissue application of  
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Filed: March 1, 2004  
Title: Optically Driven Therapeutic Radiation Source Having Spiral Shaped Thermionic  
Cathode  
  
Docket: PHLL-157RE (56249-173)

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11/4/04  
Date

*Elsie M. Saraglow*  
Elsie M. Saraglow

Mail Stop: Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

RESPONSE TO NOTICE OF FILE MISSING PARTS

In response to the Notice to File Missing Parts, dated May 4, 2004, Applicant's attorney submits herewith the Combined Declaration and Power of Attorney in Reissue Application.

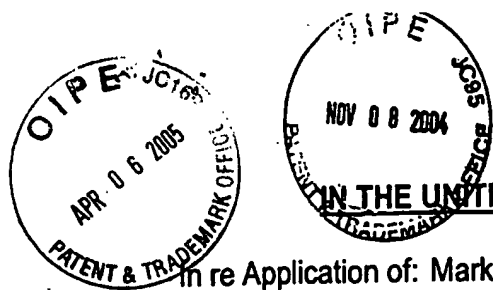
The Commissioner is hereby authorized to charge the requisite declaration surcharge of \$130.00 and the Four-month Extension of Time to File fee of \$1,530.00, as well as any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1133.

Respectfully submitted,  
McDERMOTT, WILL & EMERY  
Customer No. 23630

Date: November 4, 2004

---

Mark G. Lappin, Reg. No. 26,618  
28 State Street  
Boston, MA 02109-1775  
Telephone: (617) 535-4043  
Facsimile: (617) 535-3800



**COPY**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Mark Dinsmore

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Filed: March 01, 2004

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Having Spiral Shaped Thermionic Cathode

Attorney Ref.: 56249-173 (PHLL-157RE)

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Date: 11/4/04

*Elsie M. Saraglow*  
Elsie M. Saraglow

Mail Stop Missing Parts  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PETITION UNDER 37 CFR § 1.47(b)**

Sir:

In response to the Notice To File Missing Parts of July 4, 2004, petition is hereby made to accept the Declaration and Power of Attorney, which is enclosed herewith and is signed by Mark G. Lappin on behalf of and as an agent of the sole inventor of the above-identified reissue application, pursuant to the provisions of 37 C.F.R. § 1.47(b). The Notice To File Missing Parts of has a two (2) month shortened statutory period for response expiring September 4, 2004, and a Petition for an Extension of Time to respond to the Notice to File Missing Parts is being filed concurrently herewith.

BST99 1427009-1.056249.0173

11/09/2004 HALL11 00000026 501133 10790636  
01 FC:1460 130.00 DA

**A. SOLE INVENTOR**

Mark Dinsmore is the sole inventor of the above-identified reissue application ("Reissue Application"). At the time Mark Dinsmore invented the subject matter of the Reissue Application ("Invention"), he was an employee of Photoelectron Corporation ("Photoelectron").

**B. APPLICANT MAKES OATH**

In accordance with M.P.E.P. §409.03(b), the undersigned, Mark G. Lappin, hereby makes application for the Invention on behalf of and as agent for an inventor who refuses to sign the Declaration and Power of Attorney for the Reissue Application ("Application Papers"). Mark G. Lappin hereby states that he is authorized to sign on behalf of Carl Zeiss AG, the current assignee of the Reissue Application, in this matter for this purpose.

**C. APPLICANT'S RELATIONSHIP TO INVENTOR**

In accordance with M.P.E.P. § 409.03(b), applicant Mark G. Lappin is a registered patent attorney (Registration No. 26,618) in the Intellectual Property Department of McDermott Will & Emery LLP, acting on behalf of Carl Zeiss AG, who acquired the Reissue Application from Photoelectron. Photoelectron is the original assignee of Mark Dinsmore's interest in the Reissue Application.

**D. INVENTOR REFUSED TO SIGN THE APPLICATION PAPERS**

In accordance with M.P.E.P. §409.03(d), 1) Mark Dinsmore refused to sign the Application Papers, despite having been asked to do so; and 2) Mark Dinsmore gave a

reason for refusing to sign the Application Papers, namely that he was concerned that signing the Application Papers might limit his future business activities.

**E. PROOF OF REFUSAL TO EXECUTE THE APPLICATION PAPERS**

In accordance with M.P.E.P. §409.03(d), Mark G. Lappin submits herewith a "Declaration in Support of a Petition Under 37 C.F.R. § 1.47(b)," which fully describes the facts that are relied upon to establish that Mark Dinsmore refused to sign the Application Papers.

**F. LAST KNOWN ADDRESS**

In accordance with M.P.E.P. §409.03(e), the last known address of Mark Dinsmore is: 25 Wadsworth Road, Sudbury, MA 01776.

**G. THE INVENTOR HAS ASSIGNED THE INVENTION TO CARL ZEISS AG**

In accordance with M.P.E.P. §409.03(f), the inventor Mark Dinsmore assigned the Reissue Application to Photoelectron, which in turn assigned the Reissue Application to Carl Zeiss AG. A copy of the relevant assignment documents ("Assignment Documents") are attached to this petition. The Assignment Documents establish a prima facie case that Carl Zeiss AG has a proprietary interest in the subject matter of the Reissue Application.

**H. FILING OF THE APPLICATION IS NECESSARY TO PRESERVE THE RIGHTS OF CARL ZEISS AG**

In accordance with M.P.E.P. §409.03(g), the refusal by Mark Dinsmore to sign the Application Papers fails to preserve Carl Zeiss AG's rights granted under the

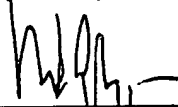
Assignment Documents, and will result in irreparable damage by causing the abandonment of the Reissue Application for failure to comply with the statutory requirements of 37 C.F.R. §1.497. The filing of the Reissue Application is necessary to preserve the rights of Carl Zeiss AG.

**I. PETITION FEE**

The Commissioner is hereby authorized to charge the petition fee in accordance with 37 C.F.R. 1.117(i), as well as the petition fee for an extension of time under 37 C.F.R. § 1.136, to Deposit Account 50-1133. The Commissioner is hereby authorized to charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-1133.

Date: November 4, 2004

Respectfully submitted,



---

Mark G. Lappin  
Registration Number 26,618  
McDERMOTT WILL & EMERY LLP  
28 State Street  
Boston, Massachusetts 02109  
Tel. (617) 535-4043  
Fax: (617) 535-3800

11/4/04  
\$  
COPY

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Mark Dinsmore

Serial No.: 10/790,636 (which is a reissue application of  
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Filed: March 01, 2004

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Having Spiral Shaped Thermionic Cathode

Attorney Ref.: 56249-173 (PHLL-157RE)

Mail Stop Missing Parts  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

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Date: 11/4/04

*Elsie M. Saraglow*  
Elsie M. Saraglow

**DECLARATION OF MARK G. LAPPIN FILED  
IN SUPPORT OF PETITION UNDER 37 C.F.R. § 1.47(b)**

I, Mark G. Lappin, to the best of my knowledge and belief, do hereby state as follows:

1. I am a registered patent attorney (Registration No. 26,618) in the Intellectual Property Department of McDermott Will & Emery LLP, acting on behalf of Carl Zeiss AG, who is the current assignee of the above-referenced reissue application ("Reissue Application").
2. Mark Dinsmore is the sole inventor of the Reissue Application.
3. Mark Dinsmore is the sole inventor of U.S. Patent No. 6,493,419B2 ("Underlying Patent"), upon which the Reissue Application is based.
4. I filed and prosecuted the application that issued in due course as the Underlying Patent ("Underlying Application").
6. Because Mark Dinsmore is the sole inventor of the Underlying Patent, has reviewed the contents of the Underlying Application, and has signed the application papers for

COPY



NOV 08 2004

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/790,636	03/01/2004	Mark Dinsmore	56249-PHLL-157RE

23630  
MCDERMOTT, WILL & EMERY  
ATTN: INTELLECTUAL PROPERTY DEPT.  
28 STATE STREET  
BOSTON, MA 02109

RECEIVED  
MAY 6 2004

CONFIRMATION NO. 6535

FORMALITIES LETTER



\*OC00000012519651\*

DOCKETED  
MW&E

PCM  
7/4/04 Missing Parts  
(Final 11/4/04)

Date Mailed: 05/04/2004

## NOTICE TO FILE MISSING PARTS OF REISSUE APPLICATION

### Filing Date Granted

An application number and filing date have been accorded to this reissue application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- Consent of the assignee is present, but is unsigned. A statement of consent bearing the signature of an official authorized to act on behalf of the assignee(s) must be provided, to comply with 37 CFR 1.172.
- Assignee's statement under 37 CFR 3.73(b) is present, but is unsigned. A 37 CFR 3.73(b) statement bearing the signature of an official authorized to act on behalf of the assignee must be provided.

### SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is \$130 for a Large Entity

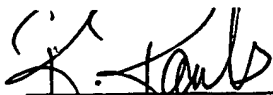
- \$130 Late oath or declaration Surcharge.

Replies should be mailed to: Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

11/09/2004 HALI11 00000026 501133 10790636

03 FC:1031 130.00 DA

A copy of this notice **MUST** be returned with the reply.

A handwritten signature in black ink, appearing to read "K. Pauls", is written over a horizontal line.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY

November 4, 2004  
U.S.S.N. 10/718,506  
Page- 2 -

the Underlying Application, Mark Dinsmore is thoroughly familiar with the subject matter disclosed in the Reissue Application.

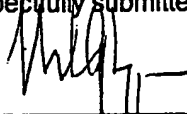
7. On or about November 3, 2004, I spoke with Mark Dinsmore, explaining to him the proposed changes to the claims of the Reissue Application, as compared to the claims of the Underlying Patent.

8. The Reissue Application was offered to Mark Dinsmore, and Mark Dinsmore's signature of the Declaration and Power of Attorney for the Reissue Application ("Application Papers") was solicited.

Mark Dinsmore expressly stated that he would not sign the Application Papers. Mark Dinsmore's express oral statement occurred on November 3, 2004, in Massachusetts.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of any application or patent issued thereon.

Respectfully submitted,



Date: November 4, 2004

Mark G. Lappin  
Registration Number 26,618  
McDERMOTT WILL & EMERY LLP  
28 State Street  
Boston, Massachusetts 02109  
Tel. (617) 535-4043  
Fax: (617) 535-3800

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In re Application of: Mark Dinsmore

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Title: OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE  
HAVING SPIRAL SHAPED THERMIONIC CATHODE

Attorney Ref.: 56249-173 (PHLL-157RE)

Mail Stop Missing Parts  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

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Date: 11/4/04

*Elsie M. Saraglow*  
Elsie M. Saraglow

**STATEMENT EXPLAINING  
CHANGE IN NAME OF ASSIGNEE**

I, Mark G. Lappin, to the best of my knowledge and belief, do hereby state as follows:

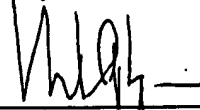
1. I am a registered patent attorney (Registration No. 26,618) in the Intellectual Property Department of McDermott, Will & Emery, acting on behalf of Carl Zeiss AG.

2. The current assignee of the above-referenced reissue application ("Reissue Application"), as shown in assignment document ("Assignment Document") recorded in the United States Patent and Trademark Office at Reel 014981, Frame 0591, is "Carl-Zeiss-Stiftung Doing Business as Carl Zeiss."

3. On July 1, 2004, "Carl-Zeiss-Stiftung Doing Business as Carl Zeiss" changed its legal status to a German stock corporation and concurrently changed its name to "Carl Zeiss AG." A document showing the name change is attached hereto.

4. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of any application or patent issued thereon.

Respectfully submitted,

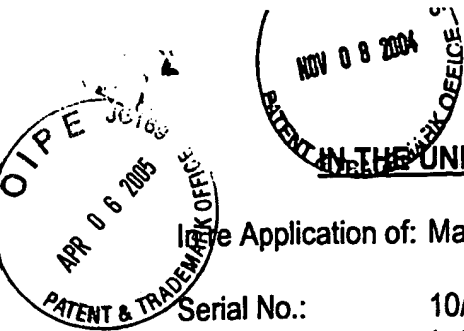


Date: November 4, 2004

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Registration Number 26,618  
McDERMOTT WILL & EMERY LLP  
28 State Street  
Boston, Massachusetts 02109  
Tel.: (617) 535-4043  
Fax: (617) 535-3800

COPY



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Initial Application of: Mark Dinsmore

Serial No.: 10/790,636  
(which is a reissue application of U.S. Patent No. 6,493,419,  
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*Gayle Endres*  
Gayle Endres

Mail Stop Missing Parts  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**STATEMENT UNDER 37 CFR 3.73(b)**

Carl Zeiss AG

(Name of Assignee)

(Type of Assignee)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of:

- A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel 012640, Frame 0834 for which a copy thereof is attached.

AND

- B. ☒ A chain of title (Asset Purchase Agreement) from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: Photoelectron Corporation To: Carl-Zeiss-Stiftung doing  
business as Carl Zeiss

The document was recorded in the Patent and Trademark Office at

Reel 014981 Frame 0591, for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at

Reel \_\_\_\_\_ Frame \_\_\_\_\_, for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at

Reel \_\_\_\_\_ Frame \_\_\_\_\_, for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on at.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Signature: \_\_\_\_\_

COPY

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Re Application of: Mark Dinsmore

Serial No.: 10/790,636  
(which is a reissue application of U.S. Patent No. 6,493,419,  
issued December 10, 2002)

Filed: March 1, 2004

Title: OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE  
HAVING SPIRAL SHAPED THERMIONIC CATHODE

Attorney Ref.: 56249-173 (PHLL-157RE)

**CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail under 37 CFR 1.8(a) in an envelope addressed to Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Date: 11/4/04

  
Gayle Endres

Mail Stop Missing Parts  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**ASSENT OF ASSIGNEE TO REISSUE**

Sir:

The undersigned **Carl Zeiss AG**, with a post address **Carl Zeiss Strass 22, 73447 Oberkochen, Germany**, assignee of the entire interest in the above-mentioned Letters Patent, hereby assents to the accompanying reissue patent application. Attached is a "Statement Under 37 CFR 3.73(b)," establishing the right of the assignee, **Carl Zeiss AG**, doing business as **Carl Zeiss AG**, to take action in this reissue application. The undersigned is empowered to sign this certificate on behalf of the assignee.

Respectfully submitted,

**CARL ZEISS AG**

Date: October 12, 2004

By: 

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of: Mark Dinsmore  
Serial No.: 10/790,636  
(which is a reissue of 6,493,419, issued December 10, 2002)  
Filed: March 1, 2004  
Title: OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE  
HAVING SPIRAL SHAPED THERMIONIC CATHODE  
Attorney Ref.: 56249-173 (PHLL-157RE)

CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

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Date:

11/4/04

*Elsie M. Saraglow*  
Elsie M. Saraglow

Mail Stop Missing Parts  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

COMBINED DECLARATION AND POWER OF ATTORNEY  
IN REISSUE APPLICATION

Sir:

I, Mark Dinsmore, declare that:

1. My residence address is 25 Wadsworth Road, Sudbury, MA 01776.
2. I am a citizen of the United States of America.
3. I believe I am the original, first and sole inventor of the subject matter that is described and claimed in United States Patent Number 6,493,419 (hereinafter "the '419 patent"), granted on December 10, 2002, and for which I solicit a reissue patent.
4. I have read and understand the contents of the attached reissue application, including the specification and claims.

5. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

6. I believe the '419 patent, which matured from application Serial No. 09/884,229, filed on June 19, 2001, to be wholly or partly inoperative or invalid by reason of my claiming less than I had a right to claim in the patent. The error includes not having claimed a probe having a radiation source at a distal end, and including: a) a probe assembly including an optical delivery structure adapted for transmitting optical radiation; b) an optical source for generating optical radiation directed to an end of said optical delivery structure; c) a radiation source coupled to a distal end of said optical delivery structure, said radiation source comprising a thermionic cathode and a target element; i) wherein the thermionic cathode is responsive to said optical radiation transmitted to said distal end to emit electrons, and wherein said thermionic cathode comprises a spiral-shaped conductive element; and ii) wherein said target element is responsive to incident electrons emitted from said thermionic cathode to emit radiation; d) means for establishing an accelerating electric field extending between said electron source toward said target element, the electric field being effective to accelerate electrons emitted from the thermionic cathode toward said target element; wherein said optical delivery structure is adapted to direct a beam of optical radiation transmitted therethrough to impinge upon a surface of the thermionic cathode, and wherein said beam of transmitted optical radiation has a power level sufficient to heat at least a portion of said surface to an electron emitting temperature so as to cause thermionic emission of electrons from said surface.

7. All errors being corrected in the reissue application, up to the time of filing this declaration, arose without any deceptive intent.

U.S.S.N. 10/790,636

8. I appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Mark G. Lappin, Registration No. 26,618

Toby H. Kusmer, Registration No. 26,418

Elizabeth E. Kim, Registration No. 43,334

David M. Mello, Registration No. 43,799

Jeffrey J. Miller, Registration No. 39,773

Brian Colandreo, Registration No. 42,427

Jeffrey Barclay, Registration No. 48,950

**CUSTOMER NUMBER 23630**

Send correspondence to the address associated with Customer Number 23630:

---

**SEND CORRESPONDENCE TO:**

Mark G. Lappin  
McDermott, Will & Emery  
28 State Street  
Boston, MA 02109

**DIRECT TELEPHONE CALLS TO:**

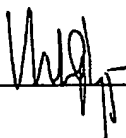
Mark G. Lappin (617-535-4043)

---

10. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date

12/4/04

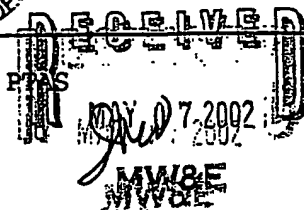
 For Mark G. Lappin



COPY

MAY 01, 2002

MCDERMOTT, WILL & EMERY  
ELIZABETH E. KIM  
28 STATE STREET  
BOSTON, MA 02109



Commissioner for Trademarks  
Arlington, VA 22202-3513  
www.uspto.gov



\*102009657A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/25/2002

REEL/FRAME: 012640/0834  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

DINSMORE, MARK

DOC DATE: 01/25/2002

ASSIGNEE:

PHOTOELECTRON CORPORATION  
5 FORBES ROAD -SUITE 2  
LEXINGTON, MASSACHUSETTS 02421

SERIAL NUMBER: 10005290  
PATENT NUMBER:

FILING DATE: 12/04/2001  
ISSUE DATE:

SERIAL NUMBER: 60229204  
PATENT NUMBER:

FILING DATE: 08/31/2000  
ISSUE DATE:

SERIAL NUMBER: 09884664  
PATENT NUMBER:

FILING DATE: 06/19/2001  
ISSUE DATE:

SERIAL NUMBER: 09884561  
PATENT NUMBER:

FILING DATE: 06/19/2001  
ISSUE DATE:

012640/0834 PAGE 2

SERIAL NUMBER: 10005289  
PATENT NUMBER:

FILING DATE: 12/04/2001  
ISSUE DATE:

SERIAL NUMBER: 09884229 56249-191  
PATENT NUMBER: PHIL-157

FILING DATE: 06/19/2001  
ISSUE DATE:

SERIAL NUMBER: 10005287  
PATENT NUMBER:

FILING DATE: 12/04/2001  
ISSUE DATE:

TONYA LEE, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

# PATENTS



102009657

Tab settings → → →

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
Mark Dinsmore

2. Name and address of receiving party(ies):

Name: Photoelectron Corporation

Internal Address: \_\_\_\_\_

Street Address: 5 Forbes Road - Suite 2

City: Lexington State: MA ZIP: 02421

Additional names(s) of conveying party(ies) ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Additional name(s) & address(es) attached? ☐ Yes ☒ No

Execution Date: January 25, 2002

4. Application number(s) or registration numbers(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

B. Patent No.(s)

10/005,290      09/884,561      09/884,229  
60/229,204      10/005,289      10/005,287  
09/884,664

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Elizabeth E. Kim

Internal Address: McDermott, Will & Emery

Street Address: 28 State Street

03/11/2002 6TDH11 00000075 10005290

01 FC:581  
City: Boston

280.00 OP  
State: MA ZIP: 02109

6. Total number of applications and patents involved: 7

7. Total fee (37 CFR 3.41):.....\$ 280.00

☒ Enclosed - Any excess or insufficiency should be credited or debited to deposit account

☐ Authorized to be charged to deposit account

8. Deposit account number:

50-1133

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Elizabeth E. Kim

Elizabeth E. Kim

February 6, 2002

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: 4

## ASSIGNMENT OF PATENT RIGHTS

I, Mark Dinsmore, of 85 Horse Pond Road, Sudbury, MA 01776, having invented certain inventions and improvements embodied and described in the patent applications (the "Patent Applications") listed in the attached Schedule of Patent Applications and which forms part of this Assignment, for \$1 and other good and valuable consideration, receipt and sufficiency of which are hereby acknowledged from Photoelectron Corporation., a Massachusetts Corporation having a principal place of business at 5 Forbes Road - Suite 2, Lexington, MA 02421-7305 USA, and hereinafter referred to as the Assignee (which term shall include the successors and assigns), do hereby sell, assign and transfer to the Assignee my entire right, title, and interest, in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, in and to and under said application (which term shall include hereinafter where the context so admits all divisional, continuing, reissue and other patent applications based thereon) and all inventions (which term shall include each and every such invention, or any part thereof) therein described, and any and all patents and like rights of exclusion (including extensions thereof) of any country which may be granted on or for said inventions or on said application.

And for the same consideration I do also hereby sell, assign and transfer unto the Assignee all my rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty and all other treaties of like purpose in respect of said inventions and said application, and do hereby authorize the Assignee to apply in my name or in its own name (in a manner to be agreed upon by the Assignee) or its designee, for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration I do hereby agree for myself and for my heirs, executors and administrators, promptly upon request of the Assignee, to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee fully to secure to it said right, title, and interest as aforesaid in and to said inventions, application, and said several patents and like rights of exclusion, or any of them, all, however, at the expense of the Assignee;

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignee any and all patents and like rights of exclusion which may be granted in any country upon said application or on or for said inventions;

And I do hereby covenant for myself and for my respective legal representatives and agree with the Assignee that I have granted no right or license to make, use or sell said inventions to anyone except the Assignee, that prior to the execution of this deed my right, title and interest in and to said inventions has not been otherwise encumbered by me, and that I have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I hereunto set my hand and seal on the day and year hereinafter noted.



Mark Dinsmore

State of Massachusetts  
County of United States ss.

Before me this 25<sup>th</sup> day of January, 2002, personally appeared Mark Dinsmore, and acknowledged the foregoing instrument to be his or her free act and deed.

Elizabeth E. Kim  
Notary Public

SEAL

PHLL-000 (56249-010)

McDERMOTT, WILL & EMERY  
28 State Street  
Boston, MA 02109  
(617) 535-4000

## **MARK DINSMORE ASSIGNMENT**

### **SCHEDULE OF PATENT APPLICATIONS**

The Patent Applications include:

- 1) U.S. Patent Application Serial Number 10/005,290, filed December 4, 2001, entitled THERAPEUTIC RADIATION SOURCE WITH IN SITU RADIATION DETECTING SYSTEM
- 2) U.S. Patent Application Serial Number 09/884,561, filed June 19, 2001, entitled OPTICALLY DRIVE THERAPEUTIC RADIATION SOURCE
- 3) U.S. Patent Application Serial Number 09/884,229, filed June 19, 2001, entitled OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE HAVING A SPIRAL-SHAPED THERMIONIC CATHODE
- 4) U.S. Provisional Patent Application Serial Number 60/229,204, filed June 19, 2001, entitled OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE WITH VOLTAGE GRADIENT CONTROL
- 5) U.S. Patent Application Serial Number 10/005,289, filed December 4, 2001, entitled OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE INCLUDING A NON-PLANAR TARGET CONFIGURATION
- 6) U.S. Patent Application Serial Number 10/005,287, filed December 4, 2001, entitled THERAPEUTIC RADIATION SOURCE WITH INCREASED CATHODE EFFICIENCY
- 7) U.S. Patent Application Serial Number 09/884,664 filed June 19, 2001, entitled X-RAY SOURCE FOR MATERIALS ANALYSIS SYSTEMS



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Mark Dinsmore

Examiner: N/A

Serial No.:

10/790,636 (which is a reissue application of  
6,493,419, issued December 10, 2002)

Filing Date:

March 1, 2004

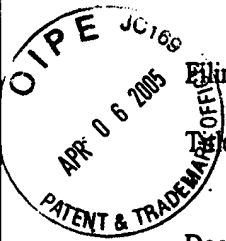
Group Art Unit: 2882

Title:

Optically Driven Therapeutic Radiation Source Having Spiral Shaped  
Thermionic Cathode

Docket Number:

PHLL-157RE (56249-173)



CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

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Date:

11/4/04

*Elsie M. Saraglow*  
Elsie M. Saraglow

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

PETITION FOR A FOUR-MONTH EXTENSION OF TIME

Dear Sir:

Applicant respectfully petitions for an extension of time of four months to file a Response to the Notice to File Missing Parts of Reissue Application dated May 4, 2004. This will serve to extend the time for filing the Response up to and including November 4, 2004.

In connection with the foregoing matter, the Commissioner is hereby authorized to charge the \$1,530.00 requisite fee for the four month extension of time, and any additional fees which may be due, or credit any overpayment, to Deposit Account Number 50-1133.

~~11/09/2004 HAL111 00000026 501133 10790636~~  
~~02 FC:1252 430.00 DA~~

Adjustment date: 11/10/2004 HAL111  
11/09/2004 HAL111 00000026 501133 10790636  
02 FC:1252 430.00 CR

Date:

11/4/04

BST99 1432466-1.056249.0173

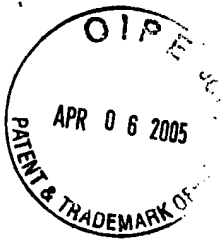
11/10/2004 HAL111 00000003 501133 10790636

01 FC:1254 1530.00 DA

Respectfully submitted,  
McDermott Will & Emery LLP  
Customer No. 23630

*[Signature]*  
Mark G. Lappin, Esq., Reg. No. 26,618  
28 State Street  
Boston, Massachusetts 02109  
Tel. (617) 535-4411  
Fax: (617) 535-3800

COPY



Re Application of:

Mark Dinsmore

Due Date:

Mailed: November 4, 2004

Mailer: Elsie M. Saraglow

For: Optically Driven Therapeutic Radiation Source Having Spiral Shaped Thermionic Cathode

Serial No. 10/790,636

Patent No.

PHLL-157RE  
Docket(56249-173)

In the above matter, the following has been received in the U.S. Patent and Trademark Office on the date stamped hereon.

☐ Specification, Abstract and

( / ) Claims — ( ) Total Pages

☒ Declaration and Power (in Reissue App)

☐ Drawing ( sheets)

☒ Assignment (Executed Copy)

☐ Check \$

☐ Request for Recordation

☐ Information Disclosure Statement

☐ Small entity verification

☒ ~~Resp. Notice File Missing Parts; Petition 37CFR 1.47(b); Dec. in Support of Petition; Assent of Assignee; Statement Under 37 CFR 3.73(b); Statement re: Name Change of Assignee; Copy of Notice File Missing Parts.~~

☒ Acknowledgment Postcard.

☒ Extension of time Four-Month

☐ Amendment

☒ Cert. of Mailing

☐ Maintenance Fee Transmittal

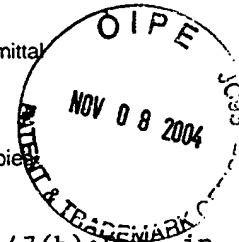
☐ Affidavit (w/w Exhibits)

☐ Notice of Appeal

☐ Brief ( ) copies

☐ Issue fee transmittal

☒ Transmittal letter



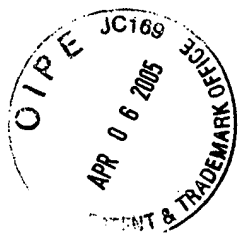
RECEIVED  
NOV 15 2004

MW&E

ORS

PCM

KAD



Kopie (Auszug)

Abschrift



Nummer 23 der Urkundenrolle für 2004



Verhandelt

zu Frankfurt am Main am 20. April 2004

Vor dem unterzeichneten Notar

**Dr. Michael Thoma**

mit dem Amtssitz in Frankfurt am Main, Bockenheimer Landstraße 51 - 53,

erschieden:

1. Herr Dr. Gordon Weber, geboren am 06. Februar 1961 in Düsseldorf, wohnhaft Kalkurner Schloßallee 43, 40489 Düsseldorf, ausgewiesen durch Reisepaß Nr. M 0425546, ausgestellt am 22.03.2004 durch den Oberbürgermeister der Stadt Düsseldorf.
2. Herr Ulrich Hoffmann, geboren am 11. April 1956 in Göttingen, wohnhaft Friedrich-Schwarz-Straße 41, 73430 Aalen, ausgewiesen durch Bundespersonalausweis Nr. 6386820889, ausgestellt am 21. Februar 2001 durch das Bürgermeisteramt Aalen.

Vor Eintritt in die nachstehende Beurkundung belehrte der Notar die Erschienenen über die Bestimmung des § 3 Abs. 1 Nr. 7 BeurkG. Die Erschienenen erklärten daraufhin, es liege kein Mitwirkungsverbot nach dieser Bestimmung vor.

Der Erschienene zu 1. erklärte:

Nachfolgend handele ich nicht im eigenen Namen, sondern namens und im Auftrag der

**Carl-Zeiss-Stiftung,  
Heidenheim an der Brenz und Jena,  
in den Angelegenheiten ihres Stiftungsunternehmens  
Carl Zeiss, Carl-Zeiss-Straße 22, 73447 Oberkochen,**

aufgrund notariell beglaubigter Vollmacht vom 13. April 2004, die bei der Beurkundung im Original vorlag und dieser Urkunde in beglaubigter Abschrift als Anlage beigelegt wird.

Der Erschienene zu 2. erklärte:

Nachfolgend handele ich nicht im eigenen Namen, sondern namens und im Auftrag der im Handelsregister des Amtsgerichts Aalen unter HR B 1555-A eingetragenen

**Carl Zeiss AG  
mit Sitz in Oberkochen,**

aufgrund notariell beglaubigter Vollmacht vom 07. April 2004, die bei der Beurkundung im Original vorlag und dieser Urkunde in beglaubigter Abschrift als Anlage beigelegt wird.

Die Erschienenen erklärten sodann mit der Bitte um Beurkundung den folgenden

### **Ausgliederungs- und Übernahmevertrag**

zwischen

der **Carl-Zeiss-Stiftung**, Heidenheim an der Brenz und Jena, in den Angelegenheiten ihres Stiftungsunternehmens **Carl Zeiss**, Carl-Zeiss-Straße 22, 73447 Oberkochen, als übertragendem Rechtsträger

- nachfolgend auch "CZS" oder "übertragender Rechtsträger" -

- 3 -

und

der Carl Zeiss AG, Carl-Zeiss-Straße 22, 73447 Oberkochen, als übernehmendem Rechtsträger

- nachfolgend auch "CZ AG" oder "übernehmender Rechtsträger",  
CZS und CZ AG zusammen auch die "Vertragsparteien" genannt -.

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Anlage 1	§ 3.1	Ausgliederungsbilanz des Stiftungsunternehmens
Anlage 2	§ 5.1	Grundbesitz des Stiftungsunternehmens Carl Zeiss
Anlage 3	§ 6.2	Vom Stiftungsunternehmen Carl Zeiss genutzte Räume
Anlage 4	§ 7.1	Beteiligungen des Stiftungsunternehmens Carl Zeiss
Anlage 5	§ 17.2	Vereinbarung zum Ausgleich der Nutzung von Verlustvor- trägen
Anlage 6	§ 24	Bevollmächtigte

I.

Vorbemerkung

- 0.1 Die Carl-Zeiss-Stiftung ("CZS") mit Sitz in Heidenheim an der Brenz und Jena ist unmittelbare Trägerin der beiden Stiftungsunternehmen Carl Zeiss, Oberkochen, und SCHOTT GLAS, Mainz. In den Angelegenheiten ihres Stiftungsunternehmens Carl Zeiss ist sie eingetragen im Handelsregister des Amtsgerichts Heidenheim an der Brenz unter HRA 1010.
- 0.2 Die Carl Zeiss AG ("CZ AG" oder "Gesellschaft") mit Sitz in Oberkochen ist eingetragen im Handelsregister des Amtsgerichts Aalen unter HRB 1555-A. Das Grundkapital der Gesellschaft beträgt bei Abschluss dieses Vertrags EUR 50.000 und ist eingeteilt in 50.000 auf den Namen lautende Aktien im Nennbetrag von je einem Euro. Alleinige Aktionärin der CZ AG ist die CZS. Die Gesellschaft ist am 17. Dezember 2003 errichtet und am 22. März 2004 in das Handelsregister eingetragen worden.
- 0.3 Die Stiftungsunternehmen Carl Zeiss und SCHOTT GLAS sollen im Zuge der Neuordnung der Carl-Zeiss-Stiftung jeweils in die Rechtsform der Aktiengesellschaft überführt werden. Alleinige Aktionärin dieser Gesellschaften wird die CZS sein. Zu diesem Zweck sollen die beiden Stiftungsunternehmen zusammen mit den zu ihnen jeweils gehörenden sämtlichen Unternehmensbereichen, also mit ihren jeweiligen sämtlichen Vermögensgegenständen und Beteiligungen, gemäß §§ 161, 123 Abs. 3 Nr. 1 UmwG aus der CZS auf Aktiengesellschaften ausgegliedert werden.
- 0.4 Von diesem Ausgliederungsvertrag erfasst werden sämtliche Vermögensgegenstände des Stiftungsunternehmens Carl Zeiss mit Ausnahme
- der Anteile an der CZ AG, und
  - eines Betrags in Höhe von EUR 5 Mio., welcher der Carl-Zeiss-Stiftung zur Erfüllung ihrer statutarischen Verpflichtungen und zur Deckung ihrer Verwaltungskosten verbleibt.

Die Vermögensgegenstände des Stiftungsunternehmens SCHOTT GLAS werden mit einem separaten Ausgliederungsvertrag auf eine Aktiengesellschaft, die künftig als SCHOTT AG firmieren wird, übertragen.

Dies vorweggeschickt vereinbaren CZS und CZ AG Folgendes:

## II.

### Ausgliederung, Ausgliederungstichtag und Bilanz

#### § 1

##### Ausgliederung

- 1.1 CZS als übertragender Rechtsträger überträgt im Wege der Ausgliederung zur Aufnahme gemäß §§ 161, 123 Abs. 3 Nr. 1 UmwG als Teil ihres Vermögens alle dem Stiftungsunternehmen Carl Zeiss zuzuordnenden Gegenstände des Aktiv- und Passivvermögens mit allen Rechten und Pflichten als Gesamtheit auf die CZ AG als übernehmenden Rechtsträger gegen Gewährung von Anteilen der CZ AG an die CZS (insgesamt das "auszugliedernde Vermögen"). Hierzu gehören insbesondere sämtliche dem Stiftungsunternehmen Carl Zeiss zuzuordnenden Beteiligungen an anderen Unternehmen sowie die Betriebe des Stiftungsunternehmens Carl Zeiss in Oberkochen, Göttingen, Aalen und Nattheim sowie die Zweigniederlassungen in Berlin und Köln mit allen jeweils dazugehörigen Vermögensgegenständen.
- 1.2 Vermögensgegenstände, Rechte, Verbindlichkeiten, Verpflichtungen, Haftungen und Pflichten des übertragenden Rechtsträgers, die nicht dem Stiftungsunternehmen Carl Zeiss zuzuordnen sind oder die von der Übertragung in diesem Vertrag ausdrücklich ausgenommen sind, werden nicht auf den übernehmenden Rechtsträger übertragen.

#### § 2

##### Ausgliederungstichtag

Die Übertragung des in § 1 bezeichneten und in §§ 4 bis 11 dieses Vertrags spezifizierten Vermögens des übertragenden Rechtsträgers erfolgt im Verhältnis zwischen dem übertragenden Rechtsträger und dem übernehmenden Rechtsträger mit Wirkung zum 01. Oktober 2003, 0.00 Uhr. Von diesem Zeitpunkt an gelten im Innenverhältnis die Handlungen und Geschäfte des übertragenden Rechtsträgers hinsichtlich des dem Stiftungsunternehmen Carl Zeiss gehörenden Geschäftsbetriebs und der ihm zuzuordnenden Vermögensgegenstände als für Rechnung des übernehmenden Rechtsträgers vorgenommen ("Ausgliederungstichtag").

#### § 3

##### Bilanz

~~Die Bilanz des übertragenden Rechtsträgers zum Ausgliederungstichtag wird als Anlage zum Vertrag beigefügt. Die Bilanz des übernehmenden Rechtsträgers zum Ausgliederungstichtag wird als Anlage zum Vertrag beigefügt. Die Bilanz des übertragenden Rechtsträgers zum Ausgliederungstichtag wird als Anlage zum Vertrag beigefügt.~~

~~übertragenden Rechtsträger zu übertragenen Vermögen gehören insbesondere die in den nachfolgenden §§ 4 bis 11 dieses Vertrags näher bezeichneten Vermögensgegenstände.~~

~~3.0. Als Gegenstand des übertragenden Rechtsträgers sind §§ 141, 145, 147 Abs. 3 Urt. d. BG vom 10. September 2002 (I StR 100/02) zugrunde gelegt.~~

~~2.0. Der übertragende Rechtsträger wird hinsichtlich der Ausgliederung des Vermögensgegenstandes des übertragenden Rechtsträgers in seine Bauvertragsabteilung übergeben.~~

### III.

#### Gegenstand der Ausgliederung

Zu dem durch den übertragenden Rechtsträger zu übertragenden Vermögen gehören insbesondere die in den nachfolgenden §§ 4 bis 11 dieses Vertrags näher bezeichneten Vermögensgegenstände.

#### § 4

##### Gewerbliche Schutzrechte/EDV-Software

- 4.1 Der übertragende Rechtsträger überträgt auf den übernehmenden Rechtsträger die dem Stiftungsunternehmen Carl Zeiss zuzuordnenden immateriellen Vermögensgegenstände, insbesondere (a) alle auf das Stiftungsunternehmen Carl Zeiss eingetragenen inländischen und ausländischen gewerblichen Schutzrechte (z.B. Patente, Gebrauchsmuster, Marken) und vom Stiftungsunternehmen Carl Zeiss vorgenommenen Schutzrechtsanmeldungen, (b) alle Betriebsgeheimnisse einschließlich Erfindungen, zu denen die Anmeldung noch in Bearbeitung ist und (c) die dem Stiftungsunternehmen Carl Zeiss zuzuordnende EDV-Software (sei sie selbst entwickelt oder in Lizenz genutzt) sowie (d) jeweils damit im Zusammenhang stehende Arbeitnehmer-Erfindungen. Soweit der übertragende Rechtsträger nur Mitberechtigter der Schutzrechte, Betriebsgeheimnisse oder EDV-Software ist, überträgt der übertragende Rechtsträger die entsprechenden Mitberechtigungen.
- 4.2 Der übernehmende Rechtsträger übernimmt gegenüber dem übertragenden Rechtsträger die auf die Nutzung durch den übernehmenden Rechtsträger und dessen Unterlizenznehmer entfallende Erfindervergütung und sonstigen Nutzungsentgelte für die übertragenen Schutzrechte, Betriebsgeheimnisse und EDV-Software, auch soweit sie für Zeiträume vor dem Ausgliederungsstichtag anfallen.

[illegible][illegible]

~~Die folgenden Informationen sind ausschließlich für die Zwecke der Ermittlung von Straftaten bestimmt und dürfen nicht weitergegeben werden.~~

11.2 Pensionsverbindlichkeiten gegenüber den im Zeitpunkt des Betriebsübergangs bereits ausgeschiedenen Mitarbeitern

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

IV.  
Modalitäten der Übertragung

§ 12  
Vollzugsdatum

- 12.1 Die Übertragung der Gegenstände des von der Ausgliederung erfassten Aktiv- und Passivvermögens und der sonstigen Rechte und Pflichten und Rechtsstellungen des übertragenden Rechtsträgers erfolgt mit dinglicher Wirkung zum Zeitpunkt der Eintragung der Ausgliederung in das Handelsregister des übertragenden Rechtsträgers ("Vollzugsdatum").

- 12.2 Der Besitz an den beweglichen Sachen geht, soweit ihn der übernehmende Rechtsträger nicht bereits inne hat, am Vollzugsdatum auf den übernehmenden Rechtsträger über. Soweit das vorgenannte Vermögen Gegenstand eines mittelbaren Besitzverhältnisses zwischen dem übertragenden Rechtsträger und Dritten ist, endet der mittelbare Besitz des übertragenden Rechtsträgers und beginnt der mittelbare Besitz des übernehmenden Rechtsträgers mit Wirkung zum Vollzugsdatum. Soweit sich bewegliche Sachen im Besitz Dritter befinden, überträgt der übertragende Rechtsträger mit Wirkung zum Vollzugsdatum seine Herausgabeansprüche auf den übernehmenden Rechtsträger.
- 12.3 Die in der Zeit zwischen dem Ausgliederungsstichtag und dem Vollzugsdatum erfolgenden Zu- und Abgänge von Gegenständen des Aktiv- und Passivvermögens sowie von sonstigen Rechten und Pflichten werden bei der Übertragung berücksichtigt. Demgemäß überträgt der übertragende Rechtsträger auch diejenigen nach Herkunft und Zweckbestimmung dem Stiftungsunternehmen Carl Zeiss zuzuordnenden Gegenstände des Aktiv- und Passivvermögens sowie sonstigen Vertrags- und Rechtsverhältnisse, die in der Zeit zwischen dem Stichtag der Ausgliederungsbilanz und dem Vollzugsdatum dem Stiftungsunternehmen Carl Zeiss zugegangen oder in ihm entstanden sind. Entsprechend werden diejenigen Gegenstände des Aktiv- und Passivvermögens und sonstige Vertrags- und Rechtsverhältnisse, die in der Zeit bis zum Vollzugsdatum veräußert oder anders übertragen worden sind oder zu diesem Zeitpunkt nicht mehr bestehen, nicht auf den übernehmenden Rechtsträger übertragen.

### § 13 Aufgangbestimmung

[illegible]

**VII.**  
**Sonstiges**

**§ 23**  
**Grundbuchberichtigung und Anträge**

**§ 24**  
**Vollmachten**

Die Vertragsparteien bevollmächtigen hiermit die in Anlage 6 genannten Personen, und zwar jeden allein und mit dem Recht, Untervollmacht zu erteilen,

- 24.1 alle Erklärungen abzugeben und entgegenzunehmen, die im Zusammenhang mit der Umschreibung oder Grundbuchberichtigung oder Neueintragungen in Bezug auf den nach diesem Vertrag übertragenen Grundbesitz - auch Bestellung neuer Erbbaurechte - sowie sonstigen Rechten an Grundstücken, wie z.B. Grundpfandrechten und Dienstbarkeiten ggf. noch erforderlich sind, unter Einschluss etwa erforderlicher Ergänzungen und/oder Berichtigungen dieses Vertrags nebst aller schuldrechtlichen Erklärungen, dinglichen Einigungen, Bewilligungen und Anträgen;
- 24.2 ggf. erforderliche Identitätserklärungen in Bezug auf den nach diesem Vertrag übertragenen Grundbesitz sowie sonstigen Rechten an Grundstücken wie z.B. Grundpfandrechten und Dienstbarkeiten abzugeben und entgegenzunehmen;
- 24.3 ggf. erforderliche Auflassungserklärungen abzugeben und entgegenzunehmen sowie Bewilligungen und Anträge zu stellen;
- 24.4 alle Rechtshandlungen vorzunehmen und Erklärungen abzugeben, die im Zusammenhang mit der Umschreibung von immateriellen Rechten (insbesondere gewerblichen Schutzrechten), die nach diesem Ausgliederungsvertrag auf den übernehmenden Rechtsträger übergeben, erforderlich oder zweckmäßig sind.

Die vorstehende Niederschrift nebst Anlage 5 wurde den Erschienenen von dem amtierenden Notar vorgelesen; die in diesem Vertrag genannten Anlagen 1 bis einschließlich 4 und 6 wurden den Erschienenen zur Durchsicht vorgelegt und von ihnen nach ihren eigenen Angaben Seite für Seite unterzeichnet. Die Niederschrift nebst Anlagen wurde von den Erschienenen genehmigt und von ihnen und dem Notar eigenhändig wie folgt unterschrieben:

Ulrich Wulff      Gerdn. Wösch



Michael Thoma  
Notar

## Beglaubigte Abschrift

### Vollmacht

Nach § 9 des derzeit noch gültigen Stiftungsstatuts der Carl-Zeiss-Stiftung wird die Carl-Zeiss-Stiftung in den Angelegenheiten ihrer Stiftungsunternehmen gerichtlich und außergerichtlich entweder durch zwei Vorstandsmitglieder der Stiftungsunternehmen oder durch ein Mitglied des Vorstands gemeinsam mit einem Prokuristen vertreten. Als Vorstandsmitglied des Stiftungsunternehmens Carl Zeiss und Prokurist des Stiftungsunternehmens Carl Zeiss bevollmächtigen wir

1. Herrn Dr. Gordon Weber, geboren am 06.02.1961, geschäftsansässig in 55122 Mainz, Hattenbergstraße 10,
2. Herrn Josef Riedel, geb. am 05.04.1953, geschäftsansässig in 73447 Oberkochen, Carl-Zeiss-Straße 22,
3. Frau Verena Herz, geboren am 01. Mai 1976, geschäftsansässig in 60325 Frankfurt am Main, Bockenheimer Landstraße 51,

jeweils einzeln, die Carl-Zeiss-Stiftung in den Angelegenheiten ihres Stiftungsunternehmens Carl Zeiss beim Abschluss des Ausgliederungs- und Übernahmevertrags zwischen der Carl-Zeiss-Stiftung, Heidenheim an der Brenz und Jena, in den Angelegenheiten ihres Stiftungsunternehmens Carl Zeiss einerseits und der Carl Zeiss AG andererseits betreffend die Ausgliederung des Stiftungsunternehmens Carl Zeiss, Oberkochen, zu vertreten und alle in diesem Zusammenhang nach ihrem Ermessen erforderlichen und zweckmäßigen Erklärungen und Rechtshandlungen abzugeben und entgegenzunehmen. Die Vollmacht umfasst auch alle zur Durchführung erforderlichen und zweckmäßigen Vollzugshandlungen. Jeder Bevollmächtigte ist einzeln berechtigt, Untervollmacht zu erteilen.

Oberkochen, den 13. April 2004

  
Dr. Dieter Kurz

  
ppa. Claudia Bolsinger

II UR 2004 Nr. 484  
Notariat Aalen

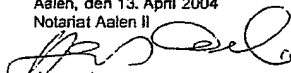
Umstehende, vor mir vollzogene Unterschriften der persönlich bekannten

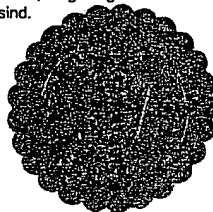
1. Herrn Dr. Dieter Kurz, Vorstandsmitglied, geb. am 4. 2. 1948,  
geschäftsansässig, Carl-Zeiss-Straße 22, 73447 Oberkochen
2. Frau Claudia Bolsinger, Prokuristin, geb. am 14. 5. 1954,  
geschäftsansässig Carl-Zeiss-Straße 22, 73447 Oberkochen,

beglaubige ich hiermit.

Gleichzeitig bescheinige ich aufgrund der mir vorliegenden beglaubigten Abschrift aus dem Handelsregister des Amtsgerichts Heidenheim an der Brenz vom 05.04.2004, HR A 1010, daß Herrn Dr. Dieter Kurz als Vorstandsmitglied und Frau Bolsinger als Prokuristin der Carl Zeiss-Stiftung, handelnd als Firma Carl Zeiss, eingetragen und als solche gemeinsam zur Vertretung derselben berechtigt sind.

Aalen, den 13. April 2004  
Notariat Aalen II

  
Hersacher-  
Notar



## Beglaubigte Abschrift

### Vollmacht

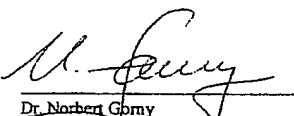
Als gemeinsam vertretungsberechtigte Vorstandsmitglieder der im Handelsregister des Amtsgerichts Aalen unter HRB 1555-A eingetragenen Carl Zeiss AG bevollmächtigen wir

1. Herrn Ulrich Hoffmann, geboren am 11. April 1956, geschäftsansässig in 73447 Oberkochen, Carl-Zeiss-Straße 22,
2. Herrn Klaus Leinmüller, geboren am 05.12.1957, geschäftsansässig in 74337 Oberkochen, Carl-Zeiss-Straße 22,
3. Frau Sabine Weiß, geboren am 13. September 1971, geschäftsansässig in 60325 Frankfurt am Main, Bockenheimer Landstraße 51,

jeweils einzeln, die Carl Zeiss AG beim Abschluss des Ausgliederungs- und Übernahmevertrags zwischen der Carl-Zeiss-Stiftung, Heidenheim an der Brenz und Jena, in den Angelegenheiten ihres Stiftungsunternehmens Carl Zeiss einerseits und der Carl Zeiss AG andererseits betreffend die Ausgliederung des Stiftungsunternehmens Carl Zeiss, Oberkochen, zu vertreten und alle in diesem Zusammenhang nach ihrem Ermessen erforderlichen und zweckmäßigen Erklärungen und Rechts-handlungen abzugeben und entgegenzunehmen. Die Vollmacht umfasst auch alle zur Durchführung erforderlichen und zweckmäßigen Vollzugshandlungen. Der Bevollmächtigte ist berechtigt, Untervollmacht zu erteilen.

Oberkochen, den 07. April 2004

  
Dr. Michael Kaschke

  
Dr. Norbert Gömy

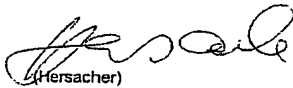
**Unterschriftsbeglaubigung und Vertretungsbescheinigung**

Die vorstehenden, vor mir vollzogenen Unterschriften der mir persönlich bekannten Herren

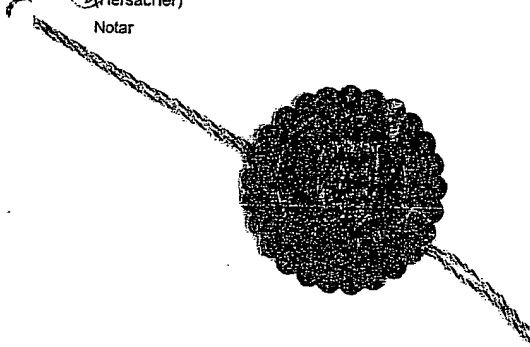
- 1) Dr. Michael Kaschke, Vorstandsmitglied, geb. am 18.6.1957,
  - 2) Dr. Norbert Gorny, Vorstandsmitglied, geb. am 18.9.1963,
- beide geschäftsansässig Carl-Zeiss-Str.22, 73447 Oberkochen,  
beglaubige ich hiermit.

Gleichzeitig bescheinige ich aufgrund meiner Einsicht in das Handelsregister des  
Amtsgerichts Aalen HR B 1555-A vom 24. März 2004, daß die beiden Herren gemeinsam  
zur Vertretung der Carl Zeiss AG mit dem Sitz in Oberkochen berechtigt sind.

Aalen, den 7. April 2004  
Notariat Aalen

  
(Hersacher)

Notar



Die wörtliche Übereinstimmung der vorstehenden Abschriften  
(insgesamt 4 Seiten) mit den mir vorliegenden Urschriften be-  
glaubige ich hiermit.

Frankfurt am Main, 20. April 2004




A handwritten signature in cursive script, appearing to read "m. thoma", written in dark ink.

Michael Thoma  
Notar

Handelsregister - Abt. B - des Amtsgerichts Aalen

Blatt 1  
(mit Fortsetzung Blatt ...)

HRB 1555-A



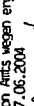
Nummer der Eintragung	a) Firma b) Sitz c) Gegenstand des Unternehmens	Grundkapital oder Stammkapital	Vorstand Persönlich haltende Geschäftsführer Abwickler	Prokura	Rechtsverhältnisse	a) Tag der Eintragung und Unterschrift b) Bemerkungen
1		3	4	5	6	7
1	<p>a. Carl Zeiss AG</p> <p>b. Oberkochen</p> <p>c. Entwicklung, Herstellung, Be- und Verarbeitung und der Vertrieb von optischen, fehmekanischen und opto-elektronischen Erzeugnissen sowie Instrumenten und sonstigen Geräten, einschließlich der Erbringung von damit jeweils zusammenhängenden Dienstleistungen.</p> <p>Die Gesellschaft kann in Erfüllung des Unternehmensgegenstandes andere Unternehmen gründen, erwerben, sich an ihnen beteiligen und solche Unternehmen oder die Anteile an ihnen ganz oder teilweise veräußern. Sie kann eigene Betriebe und Betriebsstellen veräußern oder in verbundene Unternehmen oder Beteiligungsgesellschaften ausgliedern und Anteile an verbundenen Unternehmen oder Beteiligungsgesellschaften veräußern. Sie kann Unternehmen, an denen sie beteiligt ist, unter ihrer einheitlichen Leitung zusammenfassen oder sich auf die Verwaltung der Beteiligung beschränken. Sie</p>	<p>Grundkapital 20.000,— Euro</p>	<p>Vorstand Dr. Dieter Kurz, *04.02.1948, Oberkochen,  Dr. Michael Kaschke, *18.08.1957, Oberkochen,  Dr. Norbert Gornig, *18.09.1963, Oberkochen</p>		<p>Aktiengesellschaft. Satzung festgestellt am 17.12.2003. Die Gesellschaft wird durch zwei Vorstandsmitglieder gemeinschaftlich oder durch ein Vorstandsmitglied in Gemeinschaft mit einem Prokuristen vertreten.</p>	<p>a. 22.03.2004  Satzung SB Bl. 2  Geschäftsraum:  Carl-Zeiss-Straße 22, 73447 Oberkochen</p>

- 100 - 200 - 300 - 400 - 500 - 600 - 700 - 800 - 900 - 1000

Handelsregister - Abt. B - des Amtsgerichts Aalen

Blatt 1R  
(mit Fortsetzung Blatt )

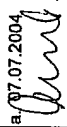
HRB 1555-A

1	2	3	4	5	6	7
Namens- der Eintragung	a) Firma b) Sitz c) Gegenstand des Unternehmens	Grundkapital , oder Stammkapital	Vorstand Persönlich haftende Gesellschafter Geschäftsführer Abwickler	Prokura	Rechtsverhältnisse	a) Tag der Eintragung und Unterschrift b) Bemerkungen
noch 1	c. darf durch solche Maß- nahmen nicht zu einer aus- schließlichen Vermögensver- waltenden Finanzholding werden.					
2				Prokurist, vertre- tungsberechtigt ge- meinschaftlich mit ei- nem Vorstandsmit- glied oder Prokuristen:  Ulrich Hoffmann, *11.04.1956, Aalen		a. 18.05.2004 
3		120.000,00- Euro			Die Gesellschaft hat am 20.04.2004 im Weg der Nachgründung einen Ausgliederungs- und Übernahmevertrag mit der Gründerin Firma Carl Zeiss, Heidenheim nach Maßgabe der eingereichten Unterlagen ge- schlossen.  Die Hauptversammlung vom 26.04.2004 hat diesem Vertrag zugestimmt und die Erhöhung des Grundkapitals zum Zwecke der Ausgliederung um EUR 119.950.000,00 auf EUR 120.000.000,00 sowie die Änderung der Satzung in § 4 (Grundkapital) beschlossen. Die Erhöhung des Grundkapitals ist im vorstehenden Umfang durchge- führt.  Die Gesellschaft (aufnehmender Rechtsträger) hat aufgrund des Ausgliederungs- und Übernahmevertrages vom 20.04.2004 einen Teil des Vermögens der Firma Carl Zeiss mit Sitz in Heidenheim (Übertra- gender Rechtsträger eingetragen AG Heidenheim HRA 1010) nach nä- herer Maßgabe der beim Gericht eingereichten Unterlagen im Weg der	a. 09.06.2004   b. Ausgl. Vertrag SB Bl. 10  Zust. Beschl. SB Bl. 11, 12, 14  Satzung SB Bl. 19 *Carl-Zeiss-Stiftung handelt in den Ange- legenheiten der Von Amts wegen ergänzt 17.06.2004 

Handelsregister – Abt. B – des Amtsgerichts Aalen

Blatt 2  
(mit Fortsetzung Blatt )

HRB 1555-A

1 Eintragung	2 a) Firma b) Sitz c) Gegenstand des Unternehmens	3 Grundkapital oder Stammkapital	4 Vorstand Persönlich leitende Gesellschafter Geschäftsführer Abwickler	5 Prokurat	6 Rechtsverhältnisse	7 a) Tag der Eintragung und Unterschrift b) Bemerkungen
noch 3					Ausgliederung aufgenommen (§§ 123 Abs. 3 Ziff. 1, 161 ff UmwG). Der Stiftungsmassar der Carl-Zeiss-Stiftung hat am 30.04.2004, die Stiftungsverwaltung der Carl-Zeiss-Stiftung hat am 17.05.2004, die Hauptversammlung der aufnehmenden Gesellschaft hat am 26.04.2004 zugestimmt. Die Ausgliederung wird erst mit Eintragung im Register des Sitzes des übertragenden Rechtsträgers wirksam.	
4				Prokurist, vertre- tungsbechtigt ge- meinschaftlich mit ei- nem Vorstandsmit- glied oder Prokuristen: Wolfgang Grothe, 108.09.1944, Aalen, Claudia Bolsinger, 14.05.1954, Aalen, Josef Riedel, 05.04.1953, Heidenheim, Karl-Günther Reick, 05.07.1949, Heidenheim, Bernhard Just, 06.07.1984, München. Prokurist unter Be- schränkung auf die Hauptniederrassung, vertretungsberechtigt gemeinschaftlich mit	Die Ausgliederung ist am 01.07.2004 im Register des Sitzes des über- tragenden Rechtsträgers Carl Zeiss, Heidenheim an der Brenz (AG Hei- denheim HRA 1010) eingetragen worden. Gemäß § 130 Abs. 2 Satz 2 UmwG von Amts wegen eingetragen.	a. 07.07.2004 

Handelsregister - Abt. B - des Amtsgerichts Aalen							Blatt 2R. (mit Fortsetzung Blatt _____)	HRB 1555
Nr. der Eintragung	a) Firma b) Sitz c) Gegenstand des Unternehmens	Grundkapital oder Stammkapital	Vorstand Persönlich haftende Gesellschafter Geschäftsführer Aufsichtsrat	Prokura	Rechtsverhältnisse	a) Tag der Eintragung und Unterschrift b) Bemerkungen		
1	2	3	4	5	6	7		
noch 4				<p>einem Vorstandsmitglied oder Prokuristen:</p> <p>Johannes B. Fischer, *04.05.1950, Tausenstein,</p> <p>Klaus Gnatzig, *11.11.1961, Königsbrunn,</p> <p>Klaus Lehmüller, *05.12.1957, Aalen,</p> <p>Geza-Richard Horn, *28.04.1950, Schwäbisch Gmünd,</p> <p>Werner Kalbfuß, *06.01.1952, Heidenheim,</p> <p>Bernhard Holl, *21.09.1952, Hüttlingen,</p> <p>Günther Mertz, *26.02.1944, Aalen,</p> <p>Armin Betzler, *06.11.1962, Aalen,</p> <p>Dr. Winfried Scherle, *14.09.1954, Aalen,</p> <p>Karl-Heinz Raffin, *13.05.1960, Heidenheim,</p>				

- 300

- 400

- 500

- 600

- 700

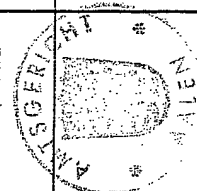

- 800

- 900

- 1000

**Handelsregister – Abt. B – des Amtsgerichts Aalen**  
 Blatt 3  
(mit Fortsetzung Blatt \_\_\_\_\_)

**HRB 1555-A**

a) Firma b) Sitz c) Gegenstand des Unternehmens	Grundkapital oder Stammkapital	Vorstand Persönlich haftende Gesellschafter Geschäftsführer Abwickler	Prokura	Rechtsverhältnisse	a) Tag der Eintragung und Unterschrift b) Bemerkungen
1	2	3	4	5	6
noch 4					
			Marc-Cyrus Vogel, 27.11.1962, Schön- ack-Kilianstädten, Franz Donner, 10.05.1961, Birkenau, Rudolf Spiller, 02.06.1955, Aalen, Dr. Michael Merin, 15.08.1966, Aalen, Peter Popp, 10.05.1955, Lena-Cospeda, Jürgen Bischoff, 20.12.1949, Rheinbach, Dr. Ludwin Monz, 20.10.1963, Mainz.		
				Die Überweisung bestehender <del>Aktiva</del> / Passiva ist in den Eintragungen im Register vom <u>19. Juli 2004</u> Urkunde des Amtsgerichts der Geschäftsstelle  Geschäftsstelle	Hinweis: Die unten mitgeteilten Teile der Bilanz sind nicht abgedruckt. Fortsetzung Rückseite

RS 111 HRB Reg. Nr. 1/98 L29

COPY

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of: Mark Dinsmore  
Serial No.: 10/790,636 (which is a reissue application of 6,493,419, issued December 10, 2002)  
Filed: March 1, 2004  
Title: Optically Driven Therapeutic Radiation Source Having Spiral Shaped Thermionic Cathode  
Docket: PHLL-157RE (56249-173)

CERTIFICATE OF MAIL

I certify that this document is being deposited on the date stated below, with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8(a) and is addressed to Mail Stop: Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dec. 3, 2004  
Date

Keiko Nakagawa  
Keiko Nakagawa

**Mail Stop: Missing Parts**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

Dear Sir:

Enclosed herewith for filing in connection with the above-identified patent application are the following:

- 1) Petition for A Five-Month Extension of Time;
- 2) Response to Notice of Incomplete Reply (Reissue);
- 3) Executed Statement Under 37 CFR § 3.73(b);
- 4) Copy of Notice of Incomplete Reply (Reissue);
- 5) Check in the amount of \$550.00; and
- 6) Return Postcard.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1133.

Respectfully submitted,

McDERMOTT, WILL & EMERY

Customer No. 23630

Elizabeth E. Kim

Elizabeth E. Kim, Reg. No. 43,334

28 State Street

Boston, MA 02109-1775

Telephone: (617) 535-4000, Facsimile: (617) 535-3800

Date: December 3, 2004



COPY

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Mark Dinsmore  
Serial No.: 10/790,636 (which is a reissue application of  
6,493,419, issued December 10, 2002)  
Filed: March 1, 2004  
Title: Optically Driven Therapeutic Radiation Source Having Spiral Shaped Thermionic  
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Dec. 3, 2004  
Date

Keiko Nakagawa  
Keiko Nakagawa

**Mail Stop: Missing Parts**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

RESPONSE TO NOTICE OF INCOMPLETE REPLY (REISSUE)

In response to the Notice of Incomplete Reply (Reissue) dated November 16, 2004, Applicant's attorney submits herewith the executed Assignee's Statement under 37 CFR 3.73 (b).

A check in the amount of \$550.00 to cover the Fifth Month Extension of Time is enclosed. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1133.

Respectfully submitted,  
McDERMOTT, WILL & EMERY  
Customer No. 23630

Date: December 3, 2004

Elizabeth E. Kim  
Elizabeth E. Kim, Reg. No. 43,334  
28 State Street  
Boston, MA 02109-1775  
Telephone: (617) 535-4000  
Facsimile: (617) 535-3800

COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor Application of:

Mark Dinsmore

Serial No.:

10/790,636 (which is a reissue application of  
6,493,419, issued December 10, 2002)

Filing Date:

March 1, 2004

Group Art Unit: 2882

Title:

Optically Driven Therapeutic Radiation Source Having Spiral Shaped  
Thermionic Cathode

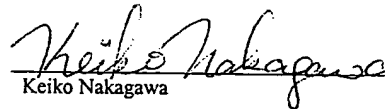
Docket Number:

PHLL-157RE (56249-173)

CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail under 37 CFR 1.8(a) in an envelope addressed to Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Date: Dec 3, 2004

  
Keiko Nakagawa

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

PETITION FOR A FOUR-MONTH EXTENSION OF TIME

Dear Sir:

Applicant respectfully petitions for an extension of time of five months to file a Response to the Notice of Incomplete Reply (Reissue) dated November 16, 2004. This will serve to extend the time to complete the Response to the Notice to File Missing Parts of Reissue Application to up to and including December 4, 2004.

Enclose is a check in the amount of \$550.00 to cover the difference between previously paid Four Month Extension of Time Fee and the Five Month Extension of Time Fee. The Commissioner is hereby authorized to charge any additional fees which may be due, or credit any overpayment, to Deposit Account Number 50-1133.

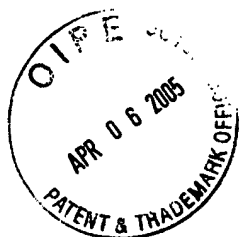
Respectfully submitted,  
McDermott Will & Emery LLP  
Customer No. 23630



Elizabeth E. Kim, Reg. No. 43,334  
28 State Street  
Boston, Massachusetts 02109  
Tel. (617) 535-4000  
Fax: (617) 535-3800

Date: Dec. 3, 2004

COPY

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Mark Dinsmore

Serial No.: 10/790,636  
(which is a reissue application of U.S. Patent No. 6,493,419,  
issued December 10, 2002)

Filed: March 1, 2004

Title: OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE  
HAVING SPIRAL SHAPED THERMIONIC CATHODE

Attorney Ref.: 56249-173 (PHLL-157RE)

**CERTIFICATE OF MAILING (37 C.F.R. § 1.9(a))**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail under 37 CFR 1.8(a) in an envelope addressed to Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Date: Dec. 3, 2004

*Keiko Nakagawa*  
Keiko Nakagawa

Mail Stop Missing Parts  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**STATEMENT UNDER 37 CFR 3.73(b)**

Carl Zeiss AG

(Name of Assignee)

(Type of Assignee)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of:

- A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel 012640, Frame 0834 for which a copy thereof is attached.

AND

- B. ☒ A chain of title (Asset Purchase Agreement) from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: Photoelectron Corporation To: Carl-Zeiss-Stiftung doing  
business as Carl Zeiss

The document was recorded in the Patent and Trademark Office at

Reel 014981 Frame 0591, for which a copy thereof is attached.

COPY

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at

Reel \_\_\_\_\_ Frame \_\_\_\_\_, for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at

Reel \_\_\_\_\_ Frame \_\_\_\_\_, for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on at.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: December 3, 2004

Name: Dr. Nikolai Gause

Title: Patent Manager

Telephone Number: + 49 (0) 7364 20 2841

Signature: Nikolai Gause

COPY



APR 06 2005

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/790,636	03/01/2004	Mark Dinsmore	56249-PHLL-157RE

CONFIRMATION NO. 6535

23630  
 MCDERMOTT, WILL & EMERY  
 ATTN: INTELLECTUAL PROPERTY DEPT.  
 28 STATE STREET  
 BOSTON, MA 02109

## FORMALITIES LETTER



\*OC000000014373346\*

Date Mailed: 11/16/2004

## NOTICE OF INCOMPLETE REPLY (REISSUE)

*Filing Date Granted*

The U.S. Patent and Trademark Office has received your reply on 11/08/2004 to the Notice to File Missing Parts (Notice) mailed 05/04/2004 and it has been entered into the reissue application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

The required items noted below SHOULD be filed along with any items required above. The filing date of this reissue application will be the date of receipt of the items required above.

- Assignee's statement under 37 CFR 3.73(b) is present, but is unsigned. A 37 CFR 3.73(b) statement bearing the signature of an official authorized to act on behalf of the assignee must be provided.

Replies should be mailed to: Mail Stop Missing Parts  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria VA 22313-1450

*A copy of this notice **MUST** be returned with the reply.*

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

01PE  
APR 06 2005  
PATENT & TRADEMARK OFFICE

COPY

Applicant: DINSMORE, MARK Docket No. 56249-173(PHLL-0157RE)  
Title: OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE HAVING SPIRAL SHAPED THERMIONIC CATHODE Serial/Reg./Patent No. 10/790636

Date Sent: 12/3/2004 ☐ Hand Carried ☐ Fax ☐ Electronic ☒ Cert. of Mailing ☐ Express Mail No. \_\_\_\_\_

☒ Transmittal Letter

New Patent App ☐ Utility ☐ Design ☐ Cont. ☐ CIP ☐ Div. ☐ PCT ☐ CPA ☐ RCE ☐ Prov

☐ Other: \_\_\_\_\_

\_\_\_\_\_ pages of Specification  
\_\_\_\_\_ pages of Claims  
\_\_\_\_\_ pages of Abstract  
\_\_\_\_\_ pages of Formal/Informal Drawings

☐ Small Entity ☐ Large Entity  
☐ Declaration/Power of Attorney  
☐ Recordation of Assignment/Security Agreement  
☐ Information Disclosure Statement

\_\_\_\_\_ Form PTO 1449  
\_\_\_\_\_ copies of cited references

☐ Preliminary Amendment  
☒ Response to Notice of Incomplete Reply (Reissue)  
☐ Resp. to Notice to Correct App. Papers

☐ Certified Copy of Priority Doc.  
☐ Claim for Convention Priority  
☐ Response/Amendment to Office Action of \_\_\_\_\_

☒ Request for 5 month Extension of Time

☐ Letter submitting \_\_\_\_\_ pages of drawings  
☐ Req. for Approval of Drawing Amendments  
☐ Req. for Oral Hearing  
☐ Not. of Appeal ☐ Appeal Brief ☐ Reply Brief  
☐ Rule 312 Amendment/Letter  
☐ Req. for Acknowledgement of Cited Art  
☐ Issue Fee  
☐ Publication Fee  
☐ Req. for Certificate of Correction  
☐ Maintenance Fee for \_\_\_\_\_ years after grant  
☐ Fee Address Indication Form  
☐ Terminal Disclaimer  
☐ Petition to Commissioner  
☐ Status Inquiry  
☐ Other Executed Statement under 37 CFR 3.73(b), copy of  
☒ Notice of Incomplete Reply (Reissue)



Check for \$	550.00	<input type="checkbox"/> Charge Deposit Acct. 50-1133\$	Atty Init.	MGL/EEK	Tkpr. #	5471	Secy. or PL:	KNakagawa
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CMS Descrip.: \_\_\_\_\_

THE PATENT AND TRADEMARK OFFICE DATE STAMPED HEREON IS ACKNOWLEDGEMENT THAT THE ITEMS, CHECKED ABOVE, WERE RECEIVED BY THE PTO ON THE DATE STAMPED.

ORS  
PCM

RECEIVED  
DEC 13 2004

MW&E